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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,823	05/14/2002	Leslie Gary Graf	27795-00027	5403

27045 7590 09/27/2006

ERICSSON INC.  
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PLANO, TX 75024

EXAMINER
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BENGZON, GREG C

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/069,823

Applicant(s)

GRAF ET AL.

Examiner

Greg Bengzon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 45-60, 62, 65-67 and 69-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45-60, 62, 65-67 and 69-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/23/2006</u>  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

This application has been examined. Claims 45-60,62, 65-67, 69-90 are pending. Claims 1-44,61,63-64, 68, have been cancelled.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/20/2006 has been entered.

### ***Priority***

This application claims benefits of priority from PCT Application PCT/AU00/01070, filed September 8, 2000 and Foreign Application (AUSTRALIA) PQ2741, filed September 9, 1999.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 45-50, 54-56, 60, 62,65-67,69-74, 77-84, 87-90 rejected under 35 U.S.C. 103(a) as being unpatentable over Kinrot (US Patent 6574193) in view of Nishio et al. (US Patent 6192039), or alternatively, Nishio in view of Kinrot.

Kinrot disclosed (re. Claim 45,74, 77-81,87-90) the information rate control processor comprising: a first sub-processor adapted to determine a plurality of maximum information transmission rates along a path of communication established between a plurality of access nodes (Kinrot – Column 3 Lines 1-5, Column 3 Lines 15-20, Column 4 Lines 10-15); a second sub-processor adapted to select a lowest one of the plurality of maximum information transmission rates (Kinrot – Column 9 Lines 25-35); and a third sub-processor adapted to authorize or establish a communication rate no greater than the selected lowest rate.(Kinrot - Column 4 Lines 15-25)

However Kinrot did not disclose (re. Claim 45) wherein the plurality of access nodes are adapted to control air interface resources and monitor the availability of the resources.

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Nishio disclosed a method for flow control (Nishio-Column 12 Lines 55-60) in a wireless communication network involving a core network and wireless endpoints.

Nishio disclosed (re. Claim 45) wherein the plurality of access nodes are adapted to control air interface resources and monitor the availability of the resources. (Nishio-Figure 2)

Kinrot and Nishio are analogous art because they present concepts and practices regarding rate control across ATM networks. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Nishio into Kinrot, such that the ATM network of Kinrot is enabled to include wireless endpoints. The motivation for said combination would have been in order to allow for Kinrot to apply the rate control across the entire ATM network, including wireless the endpoints, such that the ATM network is not affected by problems due to 'instantaneous break' (Nishio-Column 1 Lines 45-50).

Alternatively, it would have been obvious to combine Kinrot into Nishio, such that Nishio is able to apply the flow control method of Kinrot and prevent congestion across the wireless interfaces and adapt to stress levels for each VC. (Kinrot – Column 40-45)

Claims 74, 77-81,87-90 are rejected on the same basis as Claim 45.

Kinrot-Nishio disclosed (re. Claim 46,82) wherein the communication rate is dynamically authorised and/or established during a communication session (Kinrot – Column 2 Lines 1-5) based on the type of information being communicated by a wireless mobile terminal to the access node. (Kinrot-Column 3 Lines 45-50, 'ambiguity-resolving field', Column 4 Lines 60-65)

Kinrot-Nishio disclosed (re. Claim 47 ,83) wherein the communication rate is authorised and/or established at the set up of a communication session (Kinrot – Column 2 Lines 5-10) between a wireless mobile terminal and the wireless telecommunication network.

Kinrot-Nishio disclosed (re. Claim 48,84 ) wherein the communication rate is authorised and/or established prior to set up of a communication session (Kinrot – Column 2 Lines 5-10) between a wireless mobile terminal and the wireless telecommunication network.

Kinrot-Nishio disclosed (re. Claim 49) wherein the information rate control processor means is located in the access nodes. (Kinrot – Column 7 Lines 1-5)

Kinrot-Nishio disclosed (re. Claim 54, 77, 79) a core network; a plurality of access nodes each in communication with the core network wherein the plurality of access nodes are adapted to control air interface resources and monitor the availability of the resources.

Kinrot-Nishio disclosed (re. Claim 54, 60) a plurality of endpoints (Kinrot – Column 2 Lines 60-65); and an information rate control processor adapted to control a communication rate for transmission of information in the communication system among endpoints.(Kinrot - Column 4 Lines 15-25)

Kinrot-Nishio disclosed (re. Claim 50) wherein the information rate control function means is located in the core network. (Kinrot – Column 7 Lines 1-5)

Kinrot-Nishio disclosed (re. Claim 55) wherein the core network comprises an asynchronous transfer mode (ATM) network ; (re. Claim 56) wherein the ATM network includes an AAL2 adaptation layer. (Kinrot – Column 2 Lines 60-65)

Kinrot-Nishio disclosed (re. Claims 62,65-67,69-73) various well-known embodiments of an ATM networks (i.e. having a maximum transmission rate, air interface, radio networks, cellular networks, fixed access networks, mobile switching center, PSTN, ISDN).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 51, 57, 75, 85 rejected under 35 U.S.C. 103(a) as being unpatentable over Kinrot (US Patent 6574193) in view of Nishio et al. (US Patent 6192039), further in view of ITU-T Recommendation I.366.1 (Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL Type 2), hereinafter referred to as ITU-T.

Kinrot-Nishio did not disclose (re. Claim 51, 57, 75, 85) implementing the information rate control function over a Service Specific Convergence Sublayer (SSCS) using I.366.2 cells in an ATM network. While Kinrot-Nishio was concerned with congestion control in ATM networks, Kinrot would have been motivated to look for other disclosures concerning ATM networks, such as ITU-T.

ITU-T disclosed (re. Claim 51, 57, 75, 85) a flow control mechanism that allows an SSADT receiver to control the rate at which the peer SSADT transmitter entity may send information. (ITU-T – Section 9.1) ITU-T disclosed using said SSADT over AAL



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Type 2 connections as used over various embodiments of an ATM network. (ITU-T – Section 9.1, Section 9.2)

Kinrot-Nishio and ITU-T are analogous art because they present concepts and practices regarding the implementation of flow control mechanisms over an ATM network. At the time of the invention it would have been obvious to combine the teachings of ITU-T regarding using the SSADT sublayer to implement a flow control mechanism in ATM networks. The motivation for doing so would have been, as ITU-T suggests (ITU-T – Section 1), in order to implement assured data transfer features between nodes in an ATM network.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 52,53,58,59 , 76, 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinrot (US Patent 6574193) in view of Nishio et al. (US Patent

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6192039), further in view of Brueckheimer et al. (US Patent 6574224) hereinafter referred to as Brueckheimer.

Kinrot-Nishio did not disclose (re. Claims 52,53,59, 76,86) a rate control mechanism in an RTP Transport layer in an ATM network; (re. Claim 58, 76) wherein the core network is an IP network.

Brueckheimer disclosed (re. 52,53,59, 76,86) an ATM switch based resource module performing signal processing functions and interworking processed traffic between RTP and AAL1, 2, 5 (Brueckheimer – Figure 7, Column 7 Lines 1-10, Column 8 Lines 10-20). Brueckheimer disclosed (re. Claim 58, 76) wherein the core network is an IP network. (Brueckheimer – Column 8 Lines 10-20)

Kinrot,Nishio, and Brueckheimer are analogous art because they present concepts and practices regarding the implementation of control mechanisms over an ATM network. At the time of the invention it would have been obvious to combine the teachings of Brueckheimer to use RTP Transport Layer mechanisms in ATM networks. The motivation for doing so would have been, as Brueckheimer suggests (Brueckheimer – Column 2 Lines 60-65 ), in order to meet demands of the IP and ATM

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adaptation layers and the likelihood that both IP and ATM technologies will be deployed in the near term for both real-time and non-real-time services.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

The Applicant presents the following argument(s) [in italics]:

*Kinrot is entirely concerned with congestion control in an ATM network, and does not address issues arising in connection with access nodes and air interfaces in a wireless communications network. Kinrot does not discuss handling of varied bit rates necessitated by the condition of the air interface nor the nature of information transmitted over the air interface.*

The Nishio reference disclosed '*handling of varied bit rates necessitated by the condition of the air interface*'

### ***Conclusion***

**Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant.

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Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

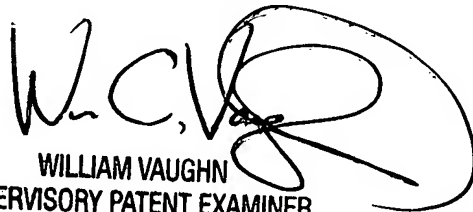
In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571)272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gcb

  
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